

05882.0131.00PC01.ST25.txt
SEQUENCE LISTING

<110> Protein Design Labs, Inc.
Balasa, Balaji
Tsurushita, Naoya
Landolfi, Nicholas F.

<120> TREATMENT OF INFLAMMATORY BOWEL DISEASES WITH ANTI-IP10
ANTIBODIES

<130> 05882.0131.00PC01

<140> Not Yet Assigned
<141> 2004-11-10

<150> PCT/US2004/014507
<151> 2004-05-07

<150> US 60/527,882
<151> 2003-12-04

<160> 79

<170> PatentIn version 3.2

<210> 1
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1

Met Asn Gln Thr Ala Ile Leu Ile Cys Cys Leu Ile Phe Leu Thr Leu
1 5 10 15

Ser Gly Ile Gln Gly Val Pro Leu Ser Arg Thr Val Arg Cys Thr Cys
20 25 30

Ile Ser Ile Ser Asn Gln Pro Val Asn Pro Arg Ser Leu Glu Lys Leu
35 40 45

Glu Ile Ile Pro Ala Ser Gln Phe Cys Pro Arg Val Glu Ile Ile Ala
50 55 60

Thr Met Lys Lys Lys Gly Glu Lys Arg Cys Leu Asn Pro Glu Ser Lys
65 70 75 80

Ala Ile Lys Asn Leu Leu Lys Ala Val Ser Lys Glu Arg Ser Lys Arg
85 90 95

Ser Pro

<210> 2
<211> 98
<212> PRT
<213> Homo sapiens

<400> 2

Met Asn Gln Thr Ala Ile Leu Ile Cys Cys Leu Ile Phe Leu Thr Leu
Page 1

05882.0131.00PC01.ST25.txt

1 5 10 15
 Ser Gly Ile Gln Gly Val Pro Leu Ser Arg Thr Val Arg Cys Thr Cys
 20 25 30
 Ile Ser Ile Ser Asn Gln Pro Val Asn Pro Arg Ser Leu Glu Lys Leu
 35 40 45
 Glu Ile Ile Pro Ala Ser Gln Phe Cys Pro Arg Val Glu Ile Ile Ala
 50 55 60
 Thr Met Lys Lys Lys Gly Glu Lys Arg Cys Leu Asn Pro Glu Ser Lys
 65 70 75 80
 Ala Ile Lys Asn Leu Leu Lys Ala Val Ser Lys Glu Arg Ser Lys Arg
 85 90 95

Ser Pro

<210> 3
 <211> 119
 <212> PRT
 <213> Mus sp.

<400> 3

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
 1 5 10 15
 Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30
 Ser Met His Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Glu Ile Gly Glu Pro Thr Tyr Ala Asp Asp Phe
 50 55 60
 Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Tyr Phe Cys
 85 90 95
 Ala Arg Asn Tyr Asp Tyr Asp Ala Tyr Phe Asp Val Trp Gly Ala Gly
 100 105 110
 Thr Thr Val Thr Val Ser Ser
 115

<210> 4
 <211> 107

05882.0131.00PC01.ST25.txt

<212> PRT

<213> Mus sp.

<400> 4

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
 1 5 10 15

Gly Lys Val Thr Ile Thr Cys Lys Ala Asp Gln Asp Ile Asn Lys Tyr
 20 25 30

Ile Ala Trp Tyr Gln His Lys Pro Gly Arg Gly Pro Arg Leu Leu Leu
 35 40 45

His His Thr Ser Thr Leu Gln Pro Gly Ile Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Arg Asp Tyr Ser Phe Ser Ile Ser Asn Leu Glu Pro
 65 70 75 80

Ala Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp Ser Leu Leu Phe
 85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 5

<211> 5

<212> PRT

<213> Mus sp.

<400> 5

Asp Tyr Ser Met His
 1 5

<210> 6

<211> 17

<212> PRT

<213> Mus sp.

<400> 6

Trp Ile Asn Thr Glu Ile Gly Glu Pro Thr Tyr Ala Asp Asp Phe Lys
 1 5 10 15

Gly

<210> 7

<211> 10

<212> PRT

<213> Mus sp.

<400> 7

Asn Tyr Asp Tyr Asp Ala Tyr Phe Asp Val
 1 5 10

05882.0131.00PC01.ST25.txt

<210> 8
 <211> 11
 <212> PRT
 <213> Mus sp.

<400> 8

Lys Ala Asp Gln Asp Ile Asn Lys Tyr Ile Ala
 1 5 10

<210> 9
 <211> 7
 <212> PRT
 <213> Mus sp.

<400> 9

His Thr Ser Thr Leu Gln Pro
 1 5

<210> 10
 <211> 9
 <212> PRT
 <213> Mus sp.

<400> 10

Leu Gln Tyr Asp Ser Leu Leu Phe Thr
 1 5

<210> 11
 <211> 414
 <212> DNA
 <213> Mus sp.

<400> 11
 atggccttggg tgtggacctt gctattcctg atggcagctg cccaaagtat ccaagcacag 60
 atccagttgg tgcagtctgg acctgagctg aagaagcctg gagagacagt caagatctcc 120
 tgcaaggctt ctggttatac cttcacagac tattcaatgc actgggtgaa gcaggctcca 180
 ggaaagggtt taaagtggat gggctggata aacactgaga ttggtgagcc aacatatgca 240
 gatgacttca agggacgggt tgccttctct ttggaaacct ctgccagcac tgcctatttg 300
 cagatcaaca acctcaaaaa tgaggacacg gctacatatt tctgtgctag aaactatgat 360
 tacgacgcgt acttcgatgt ctggggcgca gggaccacgg tcaccgtctc ctca 414

<210> 12
 <211> 381
 <212> DNA
 <213> Mus sp.

<400> 12
 atgagaccgt ctattcagtt cctggggctc ttgttgttct ggcttcatgg tgctcagtgt 60
 gacatccaga tgacacagtc tccatcctca ctgtctgcat ctctgggagg caaagtcacc 120
 atcacttgca aggcagacca agacattaac aagtatatag cttggtacca acacaagcct 180

05882.0131.00PC01.ST25.txt

ggaagagggtc ctaggctgct cctacatcac acatctacat tacagccagg catcccatca 240
 aggttcagtg gaagtgggtc tgggagagat tattccttca gcatcagcaa cctggagcct 300
 gcagatattg caacttatta ttgtctacag tatgatagtc ttctattcac gttcggctcg 360
 gggacaaagt tggaaataaa a 381

<210> 13
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 13

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30

Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
 35 40 45

Gly Trp Ile Asn Thr Glu Ile Gly Glu Pro Thr Tyr Ala Asp Asp Phe
 50 55 60

Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asn Tyr Asp Tyr Asp Ala Tyr Phe Asp Val Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser
 115

<210> 14
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 14

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Trp Val
 20 25 30

Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Val Thr Ile
 35 40 45

Thr Ala Asp Thr Ser Thr Asp Thr Ala Tyr Met Glu Leu Ser Ser Leu
 Page 5

05882.0131.00PC01.ST25.txt

50

55

60

Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Trp Gly Gln Gly
 65 70 75 80

Thr Thr Val Thr Val Ser Ser
 85

<210> 15
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 15

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Asp Gln Asp Ile Asn Lys Tyr
 20 25 30

Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Leu
 35 40 45

His His Thr Ser Thr Leu Gln Pro Gly Ile Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Arg Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp Ser Leu Leu Phe
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 16
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 16

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Trp Tyr Gln Gln Lys Pro Gly Lys Ala
 20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
 35 40 45

Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp
 50 55 60

05882.0131.00PC01.ST25.txt

Ile Ala Thr Tyr Tyr Cys Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 65 70 75 80

<210> 17
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 17
 acgcgtccac catgagaccg tctattcagt tcctggggct cttgttggtc tggcttcatg 60
 gtgctcagtg tgacatccag atgacacagt ctccatcctc actgtctgca tctgtgggag 120
 acagagtcac catcacttgc aaggcagacc aagacattaa caagtatata gcttgggtacc 180
 aacagaagcc tggaaaggct cctaagctgc tcctacatca cacatctaca ttacagccag 240
 gcatcccatc aaggttcagt ggaagtgggt ctggaagaga ttataccttc accatcagca 300
 gcctgcagcc tgaagatatt gcaacttatt attgtctaca gtatgatagt cttctattca 360
 cgttcggcca ggggacaaag ttggaaataa aacgtaagta cttttttcta ga 412

<210> 18
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 18
 Met Arg Pro Ser Ile Gln Phe Leu Gly Leu Leu Leu Phe Trp Leu His
 1 5 10 15
 Gly Ala Gln Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
 20 25 30
 Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Asp Gln Asp
 35 40 45
 Ile Asn Lys Tyr Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
 50 55 60
 Lys Leu Leu Leu His His Thr Ser Thr Leu Gln Pro Gly Ile Pro Ser
 65 70 75 80
 Arg Phe Ser Gly Ser Gly Ser Gly Arg Asp Tyr Thr Phe Thr Ile Ser
 85 90 95
 Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp
 100 105 110
 Ser Leu Leu Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 115 120 125

<210> 19
 <211> 446
 <212> DNA

05882.0131.00PC01.ST25.txt

<213> Homo sapiens

<400> 19

```

acgcgtccac catggactcg aggttgaact tggatttcct ggtgctaatt ctcaaagggtg      60
tccaatgtga ggtccagttg gtgcagtctg gagctgaggt gaagaagcct ggagcgacag      120
tcaagatctc ctgcaaagtg tctggttata ccttcacaga ctattcaatg cactgggtta      180
ggcaggctcc aggaaagggt ctaaagtgga tgggctggat aaacactgag attggtgagc      240
caacatatgc agatgacttc aagggacggt ttaccttcac tttggacacc tctaccagca      300
ctgcctatat ggagctcagc agcctccgaa gtgaggacac ggctgtatat tactgtgcta      360
gaaactatga ttacgatgcg tacttcgatg tctggggcca agggaccaca gtcaccgtct      420
cctcaggtaa gaatggccac tctaga                                           446

```

<210> 20

<211> 136

<212> PRT

<213> Homo sapiens

<400> 20

```

Met Asp Ser Arg Leu Asn Leu Val Phe Leu Val Leu Ile Leu Lys Gly
1           5           10          15

```

```

Val Gln Cys Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
20          25          30

```

```

Pro Gly Ala Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe
35          40          45

```

```

Thr Asp Tyr Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50          55          60

```

```

Lys Trp Met Gly Trp Ile Asn Thr Glu Ile Gly Glu Pro Thr Tyr Ala
65          70          75          80

```

```

Asp Asp Phe Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Ser
85          90          95

```

```

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
100         105         110

```

```

Tyr Tyr Cys Ala Arg Asn Tyr Asp Tyr Asp Ala Tyr Phe Asp Val Trp
115         120         125

```

```

Gly Gln Gly Thr Thr Val Thr Val
130         135

```

<210> 21

<211> 75

<212> DNA

<213> Artificial

05882.0131.00PC01.ST25.txt

<220>

<223> Primer

<400> 21

tataacgcgt ccaccatgga ctcgagggtg aacttggtat tcctggtgct aattctcaaa 60

ggtgtccaat gtgag 75

<210> 22

<211> 72

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 22

gactgtcgct ccaggcttct tcacctcagc tccagactgc accaactgga cctcacattg 60

gacacctttg ag 72

<210> 23

<211> 74

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 23

agaagcctgg agcgacagtc aagatctcct gcaaagtgtc tggttatacc ttcacagact 60

attcaatgca ctgg 74

<210> 24

<211> 72

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 24

gtgtttatcc agcccatcca cttagaccc tttcctggag cctgcctaac ccagtgcatt 60

gaatagtctg tg 72

<210> 25

<211> 74

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 25

tggatgggct ggataaacac tgagattggt gagccaacat atgcagatga cttcaaggga 60

cggtttacct tcac 74

<210> 26

<211> 78

<212> DNA

05882.0131.00PC01.ST25.txt

<213> Artificial

<220>

<223> Primer

<400> 26

tcctcacttc ggaggctgct gagctccata taggcagtgc tggtagaagg gtccaaagtg 60

aaggtaaacc gtcccttg 78

<210> 27

<211> 78

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 27

cagcagcctc cgaagtgagg acacggctgt atattactgt gctagaaact atgattacga 60

tgcgtacttc gatgtctg 78

<210> 28

<211> 77

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 28

tatatctaga gtggccattc ttacctgagg agacggtgac tgtggtcctt tggccccaga 60

catcgaagta cgcacgcg 77

<210> 29

<211> 24

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 29

tataacgcgt ccaccatgga ctcg 24

<210> 30

<211> 24

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 30

tatatctaga gtggccattc ttac 24

<210> 31

<211> 72

<212> DNA

<213> Artificial

05882.0131.00PC01.ST25.txt

<220>

<223> Primer

<400> 31

tataacgcgt ccaccatgag accgtctatt cagttcctgg ggctcttggt gttctggctt 60

catggtgctc ag 72

<210> 32

<211> 75

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 32

tctccacag atgcagacag tgaggatgga gactgtgtca tctggatgtc aactgagca 60

ccatgaagcc agaac 75

<210> 33

<211> 71

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 33

ctgtctgcat ctgtgggaga cagagtcacc atcacttgca aggcagacca agacattaac 60

aagtatatag c 71

<210> 34

<211> 72

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 34

tgatgtagga gcagcttagg agcctttcca ggcttctggt ggtaccaagc tatatacttg 60

ttaatgtctt gg 72

<210> 35

<211> 68

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 35

tcctaagctg ctctacatc acacatctac attacagcca ggcattccat caaggttcag 60

tggaagtg 68

<210> 36

<211> 62

<212> DNA

05882.0131.OOPC01.ST25.txt

<213> Artificial

<220>

<223> Primer

<400> 36

tgcaggctgc tgatggtgaa ggtataatct cttccagacc cacttccact gaaccttgat 60

gg 62

<210> 37

<211> 76

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 37

cttcaccatc agcagcctgc agcctgaaga tattgcaact tattattgtc tacagtatga 60

tagtcttcta ttcacg 76

<210> 38

<211> 78

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 38

tatatctaga aaaaagtact tacgttttat ttccaaacttt gtcccctggc cgaacgtgaa 60

tagaagacta tcatactg 78

<210> 39

<211> 24

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 39

tataacgcgt ccaccatgag accg 24

<210> 40

<211> 24

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 40

tatatctaga aaaaagtact tacg 24

<210> 41

<211> 119

<212> PRT

<213> Mus sp.

05882.0131.00PC01.ST25.txt

<400> 41

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

Ser Met His Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Asn Tyr Asp Tyr Asp Gly Tyr Phe Asp Val Trp Gly Ala Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 42

<211> 107

<212> PRT

<213> Mus sp.

<400> 42

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

Gly Lys Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Ile Asn Lys Tyr
20 25 30

Ile Ala Trp Tyr Gln His Lys Pro Gly Lys Gly Pro Arg Leu Leu Ile
35 40 45

His Tyr Thr Ser Thr Leu Gln Pro Gly Ile Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly ser Gly Arg Asp Tyr Ser Phe Ser Ile Ser Asn Leu Glu Pro
65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp Asn Leu Leu Phe
85 90 95

Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
100 105

05882.0131.00PC01.ST25.txt

<210> 43
 <211> 414
 <212> DNA
 <213> Mus sp.

<400> 43
 atggccttggg tgtggacctt gctattcctg atggcagctg cccaaagtat ccaagcacag 60
 atccagttgg tgcagtctgg acctgagctg aagaagcctg gagagacagt caagatctcc 120
 tgcaaggctt ctggttatac cttcacagac tattcaatgc actgggtgaa gcaggctcca 180
 ggaaaggggt taaagtggat gggctggata aacactgaga ctggtgagcc aacatatgca 240
 gatgacttca agggacgggt tgccttctct ttggaaacct ctgccagcac tgcctatttg 300
 cagatcaaca acctcaaaaa tgaggacacg gctacatatt tctgtgctag aaactatgat 360
 tacgacgggt acttcgatgt ctggggcgca gggaccacgg tcaccgtctc ctca 414

<210> 44
 <211> 381
 <212> DNA
 <213> Mus sp.

<400> 44
 atgagaccgt ctattcagtt cctggggctc ttgttgttct ggcttcatgg tgctcagtgt 60
 gacatccaga tgacacagtc tccatcctca ctgtctgcat ctctgggagg caaagtcacc 120
 atcacttgca aggcaagcca agacattaac aagtatatag cttggtacca acacaagcct 180
 ggaaaagggt ctaggtgctc catacattac acatctacat tacagccagg catcccatca 240
 aggttcagtg gaagtgggtc tgggagagat tattccttca gcatcagcaa cctggagcct 300
 gaagatattg caacttatta ttgtctacag tatgataatc ttctattcac gttcgggtcg 360
 gggacaaagt tggaaataaa a 381

<210> 45
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 45
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
 50 55 60
 Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

05882.0131.00PC01.ST25.txt

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asn Tyr Asp Tyr Asp Gly Tyr Phe Asp Val Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser
 115

<210> 46
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 46

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Ile Asn Lys Tyr
 20 25 30

Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45

His Tyr Thr Ser Thr Leu Gln Pro Gly Ile Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Arg Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp Asn Leu Leu Phe
 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 47
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 47

acgcgtccac catgagaccg tctattcagt tcctggggct cttgttggtc tggcttcatg	60
gtgctcagtg tgacatccag atgacacagt ctccatcctc actgtctgca tctgtgggag	120
acagagtcac catcacttgc aaggcaagcc aagacattaa caagtatata gcttggtacc	180
aacagaagcc tggaaaggct cctaagctgc tcatacatta cacatctaca ttacagccag	240
gcatcccatc aagggtcagt ggaagtgggt ctggaagaga ttataccttc accatcagca	300
gcctgcagcc tgaagatatt gcaacttatt attgtctaca gtatgataat cttctattca	360
cgttcggcca ggggacaaaag ttggaaataa aacgtaagta cttttttcta ga	412

05882.0131.00PC01.ST25.txt

<210> 48
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 48

Met Arg Pro Ser Ile Gln Phe Leu Gly Leu Leu Leu Phe Trp Leu His
 1 5 10 15

Gly Ala Gln Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
 20 25 30

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp
 35 40 45

Ile Asn Lys Tyr Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
 50 55 60

Lys Leu Leu Ile His Tyr Thr Ser Thr Leu Gln Pro Gly Ile Pro Ser
 65 70 75 80

Arg Phe Ser Gly Ser Gly Ser Gly Arg Asp Tyr Thr Phe Thr Ile Ser
 85 90 95

Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp
 100 105 110

Asn Leu Leu Phe Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 115 120 125

<210> 49
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 49

acgcgtccac catggactcg aggttgaact tggatttcct ggtgctaatt ctcaaagggtg 60
 tccaatgtga ggtccagttg gtgcagtctg gagctgaggt gaagaagcct ggagcgacag 120
 tcaagatctc ctgcaaagtg tctggttata ccttcacaga ctattcaatg cactgggtta 180
 ggcaggctcc aggaaagggc ctaaagtgga tgggctggat aaacactgag actggtgagc 240
 caacatatgc agatgacttc aagggacggt ttaccttcac tttggacacc tctaccagca 300
 ctgcctatat ggagctcagc agcctccgat ccgaggacac ggctgtatat tactgtgcta 360
 gaaactatga ttacgatggg tacttcgatg tctggggcca agggaccaca gtcaccgtct 420
 cctcaggtaa gaatggccac tctaga 446

<210> 50
 <211> 138
 <212> PRT
 <213> Homo sapiens

05882.0131.00PC01.ST25.txt

<400> 50

Met Asp Ser Arg Leu Asn Leu Val Phe Leu Val Leu Ile Leu Lys Gly
1 5 10 15Val Gln Cys Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
20 25 30Pro Gly Ala Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe
35 40 45Thr Asp Tyr Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60Lys Trp Met Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ala
65 70 75 80Asp Asp Phe Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Ser
85 90 95Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
100 105 110Tyr Tyr Cys Ala Arg Asn Tyr Asp Tyr Asp Gly Tyr Phe Asp Val Trp
115 120 125Gly Gln Gly Thr Thr Val Thr Val Ser Ser
130 135

<210> 51

<211> 75

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 51

tataacgcgt ccaccatgga ctcgaggttg aacttggtat tcctggtgct aattctcaaa 60

ggtgtccaat gtgag 75

<210> 52

<211> 72

<212> DNA

<213> Artificial

<220>

<223> Primer

<400> 52

gactgtcgct ccaggcttct tcacctcagc tccagactgc accaactgga cctcacattg 60

gacacctttg ag 72

<210> 53

05882.0131.00PC01.ST25.txt

<211> 74
 <212> DNA
 <213> Artificial

<220>
 <223> Primer

<400> 53
 agaagcctgg agcgacagtc aagatctcct gcaaagtgtc tggttatacc ttcacagact 60
 attcaatgca ctgg 74

<210> 54
 <211> 72
 <212> DNA
 <213> Artificial

<220>
 <223> Primer

<400> 54
 gtgtttatcc agcccatcca ctttagaccc tttcctggag cctgcctaac ccagtgcatt 60
 gaatagtctg tg 72

<210> 55
 <211> 74
 <212> DNA
 <213> Artificial

<220>
 <223> Primer

<400> 55
 tggatgggct ggataaacac tgagactggt gagccaacat atgcagatga cttcaaggga 60
 cggtttacct tcac 74

<210> 56
 <211> 78
 <212> DNA
 <213> Artificial

<220>
 <223> Primer

<400> 56
 tcctcggatc ggaggctgct gagctccata taggcagtgc tggtagaggt gtccaaagtg 60
 aaggtaaacc gtcccttg 78

<210> 57
 <211> 78
 <212> DNA
 <213> Artificial

<220>
 <223> Primer

<400> 57
 cagcagcctc cgatccgagg acacggctgt atattactgt gctagaaact atgattacga 60
 tgggtacttc gatgtctg 78

05882.0131.00PC01.ST25.txt

<210> 58
<211> 77
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 58
tatatctaga gtggccattc ttacctgagg agacggtgac tgtggtccct tggccccaga 60
catcgaagta cccatcg 77

<210> 59
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 59
tataacgcgt ccaccatgga ctcg 24

<210> 60
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 60
tatatctaga gtggccattc ttac 24

<210> 61
<211> 72
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 61
tataacgcgt ccaccatgag accgtctatt cagttcctgg ggctcttggt gttctggctt 60
catggtgctc ag 72

<210> 62
<211> 75
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 62
tctccacag atgcagacag tgaggatgga gactgtgtca tctggatgtc aactgagca 60
ccatgaagcc agaac 75

<210> 63

05882.0131.00PC01.ST25.txt

<211> 71
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 63
ctgtctgcat ctgtgggaga cagagtcacc atcacttgca aggcaagcca agacattaac 60
aagtatatag c 71

<210> 64
<211> 72
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 64
taatgtatga gcagcttagg agcctttcca ggcttctggt ggtaccaagc tatatacttg 60
ttaatgtctt gg 72

<210> 65
<211> 68
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 65
tcctaagctg ctcatatt acacatctac attacagcca ggcattccat caagggttcag 60
tggaagtg 68

<210> 66
<211> 62
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 66
tgcaggctgc tgatggtgaa ggtataatct cttccagacc cacttccact gaaccttgat 60
gg 62

<210> 67
<211> 76
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 67
cttcaccatc agcagcctgc agcctgaaga tattgcaact tattattgtc tacagtatga 60
taatcttcta ttcacg 76

05882.0131.00PC01.ST25.txt

<210> 68
<211> 78
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 68
tatatctaga aaaaagtact tacgttttat ttccaacttt gtcccctggc cgaacgtgaa 60
tagaagatta tcatactg 78

<210> 69
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 69
tataacgcgt ccaccatgag accg 24

<210> 70
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 70
tatatctaga aaaaagtact tacg 24

<210> 71
<211> 20
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 71
gccagtgat agactgatgg 20

<210> 72
<211> 21
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 72
gatggataca gttggtgcag c 21

<210> 73
<211> 17
<212> PRT
<213> Homo sapiens

05882.0131.00PC01.ST25.txt

<400> 73

Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe Lys
 1 5 10 15

Gly

<210> 74

<211> 10

<212> PRT

<213> Homo sapiens

<400> 74

Asn Tyr Asp Tyr Asp Gly Tyr Phe Asp Val
 1 5 10

<210> 75

<211> 11

<212> PRT

<213> Homo sapiens

<400> 75

Lys Ala Ser Gln Asp Ile Asn Lys Tyr Ile Ala
 1 5 10

<210> 76

<211> 7

<212> PRT

<213> Homo sapiens

<400> 76

Tyr Thr Ser Thr Leu Gln Pro
 1 5

<210> 77

<211> 9

<212> PRT

<213> Homo sapiens

<400> 77

Leu Gln Tyr Asp Asn Leu Leu Phe Thr
 1 5

<210> 78

<211> 119

<212> PRT

<213> Homo sapiens

<400> 78

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30

05882.0131.00PC01.ST25.txt

Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
 35 40 45

Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Ile Tyr Ala Asp Asp Phe
 50 55 60

Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asn Tyr Asp Tyr Asp Gly Tyr Phe Asp Val Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser
 115

<210> 79
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 79

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Thr Val Lys Ile Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30

Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
 35 40 45

Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe
 50 55 60

Lys Gly Arg Phe Thr Phe Thr Leu Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asn Tyr Asp Tyr Asp Ala Tyr Phe Asp Val Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser
 115